CLAIMS

1. Apparatus for cryogenic treatments, for use in the medical or paramedical field as well as for the cosmetic field, comprising a microapplicator (2) having a bore diameter of 20 to 120 μm supplied with a gas flow from which all foreign particles bigger than 3 μm and preferably 1 μm have been eliminated.

2. Apparatus according to claim 1 characterised in that it comprises a cartridge (8) of purified condensed gas from which all solid materials have been eliminated.

3. Apparatus according to claim 1 or 2 characterised in that it comprises a cartridge (8) with N_2O.

4. Apparatus according to any of claims 1 to 3 characterised in that the microapplicator (2) comprises a replaceable filter (14) arranged to retain particles superior to 3 μm and preferably superior to 1 μm.

5. Apparatus according to claim 4 characterised in that the microapplicator (2) comprises a replaceable filter (14) arranged to retain particles between 1 and 100 μm and preferably between 3 and 60μm in function of the said bore diameter.

6. Apparatus according to claim 4 or 5 characterised in that the filter (14) is located in or on the microapplicator (2).

7. Apparatus according to any of the claims 1 to 6, characterised in that the microapplicator (2) consists of a synthetic material such as the polycarbonate or a resin such as PEEK to reduce the phenomena of icing and the clogging-up of said microapplicator.

8. Apparatus according to any of the claims 1 to 7, characterised in that it further comprises a pipe (10), a device for regulation of the flow in the said pipe (10), a valve (3), said valve being disposed perpendicularly to said pipe (10) between said device and the said microapplicator (2) and having three distinct possible positions under the effect of a mechanical or electrical control, comprising :

- a first position where a longitudinal pipe (9) is created, which allows the flow of gas from the device to the microapplicator (2).
- a second position where the gas flow is blocked.
- a third position which permits to the gas present in the cartridge (8) to escape.

9. Process for interrupting a gaseous flow in a medical device comprising the steps of:

- providing a cylindrical valve (3) comprising a transverse pipe (9) which permits gas flow from a cartridge (8) to a microapplicator (2)
- said valve being perpendicular to the direction of the gas flow and
- providing a mechanical or electrical means to permit upward and downward movement of said valve and providing O-rings for imperviousness.

10. Process for interrupting a gaseous flow in a medical device, according to claim 9, characterised in that the cylindrical valve (3) has means, which allows escape of residual gas.

11. Microapplicator (2) for an apparatus according to any of the claims 1 to 8, characterised in that it comprises a mounted removable filter.

12. Use of the apparatus according to any of the claims 1 to 8 for the cosmetic sector and/or dermatological treatment of the skin.

13. Use of the apparatus according to any of the claims 1 to 8 for gynaecological or urological treatments.